

O Yes **[!]** No

If No, attach as an Exhibit a request for waiver and Justification therefor. Including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.
Stmt A

1m field strength contour of this proposal?

[X] Yes **0** No

I NO.,

D Yes **[K]** No

(b) If the answer to (a) Is No, does 47 C.F.R. Section 73.213 apply? (See Stmt. B)

[X] Yes **0** No

(c) If the answer to (b) Is Yes, attach as an Exhibit a Justification, Including a summary of previous waivers. (Also see Figs. 4 & 5)

(d) If the answer to (a) Is No and the answer to (b) Is No, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. (See Stmt. B, Figs. 4&5)

(e) If authorization pursuant to 47 C.F.R. Section 73.215 Is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following:

- (1) Protected and Interfering contours, In all directions (GOO), for the proposed operation.
- (2) Protected and Interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments. Including a plot showing each transmitter location, with Identifying call letters or file numbers, and Indication of whether facility Is operating or proposed. For vacant allotments, use the reference coordinates as the transmitter location.
- (3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
- (4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
- (5) The official title(s) of the map(s) used In the exhibits(s).

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast (except citizens band or amateur) radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-Induced Intermodulation Interference?

00 Yes **D** No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-Induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. [See 47 C.F.R. Sections 1J.315(b), 1J.316(e) and 73.318.1]

Exhibit No.
Stmt C

SECTION V-B - FM BROADCAST ENGINEERING DATA (Page 4)

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.
Fig. 2

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
Fig. 3

(a) the proposed transmitter location, and the radials along which profile graphs have been prepared;

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

(c) the legal boundaries of the principal community to be served.

17. Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 6,203 sq. km. Population 13,977,428

18. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
N/A

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

19. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313)*

Source of terrain data: *(check only one box below)*

☒ Linearly interpolated 30-second database ☐ 7.5 minute topographic map

(Source: NGDC TPG-0050)

☐ Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
*			
0	191.1	30.4	49.6
45	219.6	32.7	51.9
90	213.6	32.2	51.4
135	214.1	32.2	51.6
180	212.1	32.1	51.3
225	224.6	33.0	52.3
270	207.3	31.7	50.9
315	208.3	31.7	51.0

*Radial through principal community, if not one of the major radials. This radial should NOT be included in the calculation of HAAT. (site is located in principal community)

20. Environmental Statement/See 47 C.F.R. Section 1.1301 et seq.

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No


If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

Exhibit No.

If No, explain briefly why not. See Stmt. D

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name (Typed or Printed) William P. Suffa	Relationship to Applicant (e.g., Consulting Engineer) Consulting Engineer
Signature 	Address (Include ZIP Code) Lahm, Suffa & Cavell, Inc. 3975 University Drive, Suite 450 Fairfax, VA 22030
Date May 1, 1991	Telephone No. (Include Area Code) (703) 591-0110

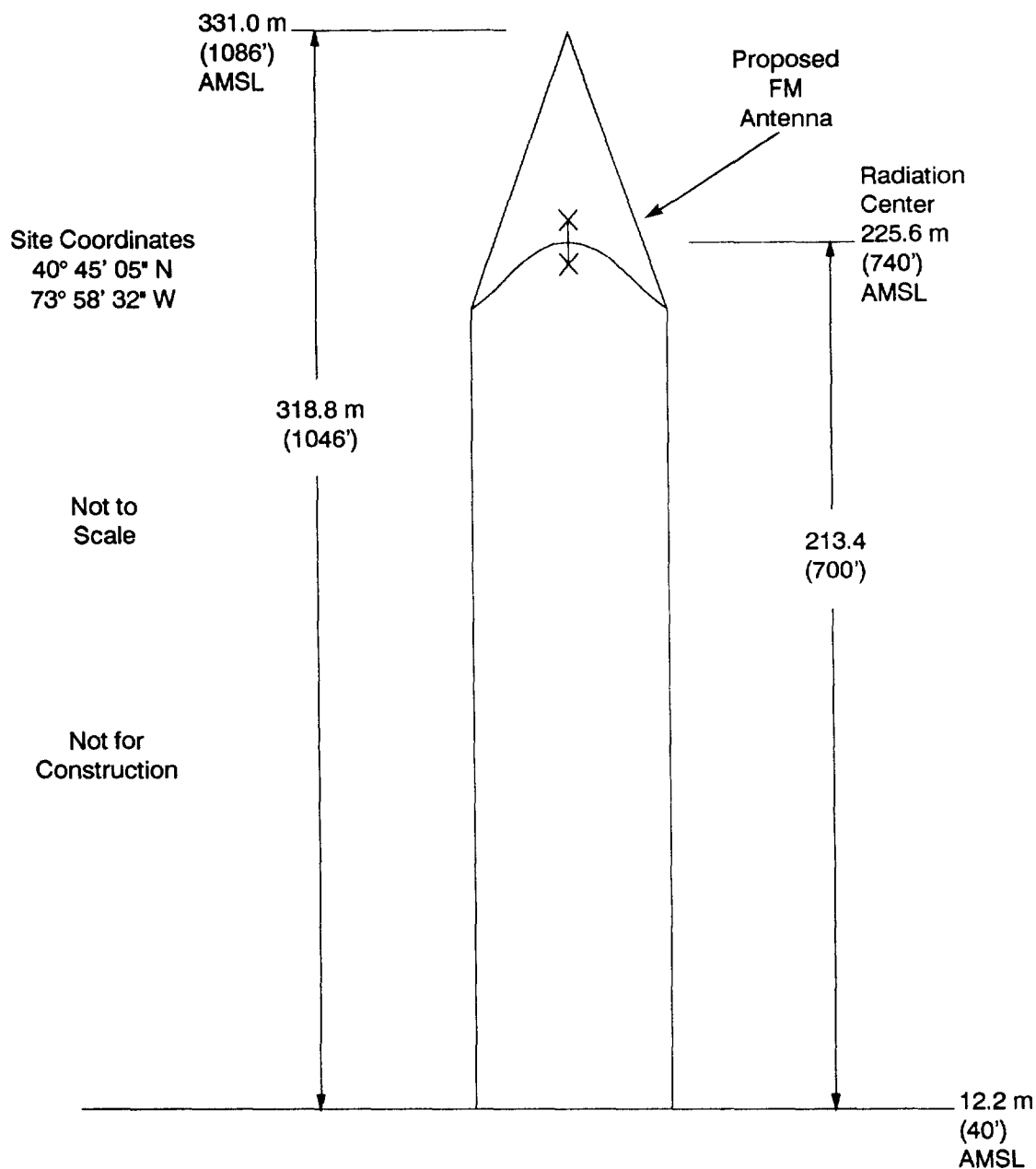


FIGURE 1
ANTENNA SYSTEM ELEVATION PLAN

prepared May 1991 for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

Lahm, Suffa & Cavell, Inc
Consulting Engineers - Fairfax, VA

Table I

ADDITIONAL AIRCRAFT LANDING AREAS

prepared for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

<u>Landing Area</u>	<u>Distance</u> (km)	<u>Bearing</u> (° True)
Port Authority Heliport	1.7	277
Arcorp Heliport	4.0	293
Lincoln Harbor Heliport	4.4	307
Lincoln Tunnel Heliport	4.4	290
One Police Plaza Heliport	4.8	206
Palisades Hosp. Heliport	4.8	350
New York Skyports Seaplane Base	5.8	205
111 Wall Street Heliport	5.9	204
Port Auth-DWNTN-MANH Heliport	5.9	207
Colgate Heliport	6.3	229
Rollins Heliport	6.3	233
WTC Battery Heliport	6.3	215
Astoria Heliport	6.7	54

Statement A

PRINCIPAL COMMUNITY COVERAGE

prepared for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

The proposed facility will provide principal community (70 dBu or better) coverage to 99 percent of the land area, and nearly 100 percent of the population of the five boroughs comprising the City of New York. The only portion not covered is a small area at the southern tip of Staten Island. That area is relatively unpopulated.

It is not believed that any waiver is required with respect to principal community coverage, as the coverage of New York City exceeds 80% of the area and population. In the event that such a waiver is required, it is hereby respectfully requested.

It is also noted that the proposal involves mounting an antenna on the side of an existing building. In the event that further engineering studies reveal that shadowing or multipath problems exist as a result of this proposal, Fidelio will undertake to eliminate those problems. In other similar situations, such corrective measures have included custom antenna designs with multiple elements on various sides of the structure. Chrysler Building engineers indicate that antenna space is available on all sides of the structure. The exact nature of such measures cannot be established until the final antenna positioning is made, and field testing is conducted.

Statement B

ALLOCATION CONSIDERATIONS

prepared for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

This proposed channel 282B facility, to be located at the Chrysler Building, is mutually exclusive with the renewal of WNCN (FM), New York, New York, which currently operates at the Empire State Building. In addition, WNCN has a pending application to relocate to the new master antenna at that same location.

WNCN (and this proposed facility) does not meet the minimum distance separations to four other facilities: WFAS, White Plains (69 km required, 32.9 km actual), WIOF, Waterbury (169 km required, 130.8 km actual), WAEB, Allentown (169 km required, 136.9 km actual), and WYXR, Philadelphia (169 km required, 133.2 km actual). These short spacings have existed for many years. WNCN has been located on the Empire State Building since before November 16, 1964, and consequently, the allocation is governed by Section 73.213(a) of the FCC Rules.

This application proposes to replace WNCN on Channel 282B with the applicant's facility. The 1 mV/m contour proposed in this application does not extend beyond the licensed 1 mV/m contour of WNCN, nor the proposed 1 mV/m contour of WNCN. Figure 4 illustrates the licensed 1 mV/m contour of WNCN, and the proposed Fidelio 1 mV/m contour.

The Fidelio application, which proposes the substitution of WNCN, is believed to carry the same grandfather status as WNCN, and therefore is believed to come under the processing provisions of Section 73.213(a). See FM Broadcast Stations, 57 RR2d 1275,1278 n.10 (1985) (Bayshore, NY) (spacing requirements in effect on date of petition for allotment, not opening of window, apply). Under Section 73.213(a) processing, a facility is permitted to relocate, provided that the 1 mV/m contour does not extend any closer to the short

spaced station. It is believed appropriate that the same technical rules of Section 73.213(a) apply to both WNCN, as well as Fidelio, or any other applicant for the channel 282B facility. Therefore, no waiver of Section 73.207 is believed necessary to process this application. See Mass Media Bureau's Consolidated comments, dated August 21, 1989, at 3, in MM Docket No. 87-246 (Bay Shore, NY proceeding) (when the Commission ruled in Bay Shore allotment order that the older mileage separation rules applied, even though the site technically was short-spaced under the new rules, the site was considered fully spaced for processing purposes).

Even if a waiver of Section 73.207 is deemed necessary, the unique circumstances are believed to warrant such a waiver, and that waiver is hereby requested to the extent required. The same cases described in the above paragraph warranting equal treatment of this application under the allocation rules also support waiver of Section 73.207.

In addition to the factors noted above, a waiver is justified here because there are no fully spaced or less short spaced locations for this facility which would provide the necessary city grade coverage over New York. No fully spaced sites are available which would permit the city grade contour to reach the city limits. Figure 5 shows the allocation constraints.

Furthermore, Section 73.215 cannot be employed for this proposal as the spacings to other facilities are below the minimums contained in the table of Section 73.215(e) of the Rules. Moreover, the reduction of coverage that would be necessary to afford equivalent protection would result in city coverage below the 80 percent threshold allowed by Commission policies. In addition, use of a directional antenna to achieve such equivalent protection would require use of a directional pattern with greater than 15 dB suppression in the direction of WFAS. Such a proposal would contravene Section 73.316(b)(1) of the Commission's Rules. Conversely, compliance with the 15 dB maximum to minimum ratio would not allow the facility to achieve minimum facilities required of Class B stations.

Consequently, a class B facility could not be authorized on channel 282 in New York without processing under Section 73.213 and/or a waiver of Section 73.207.

Statement C

INTERFERENCE CONSIDERATIONS

prepared for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

The proposed FM facility will be located at the Chrysler Building in New York. It is proposed to install a new antenna system on the building. This application is mutually exclusive with the renewal of FM station WNCN (FM), New York, New York; should this application be granted, the facility would replace the WNCN operation.

The majority of FM stations in New York operate from a master antenna located at the Empire State Building, located approximately 1 kilometer south of the Chrysler Building. That master antenna combining system, of necessity, must be designed to accept multiple high power FM signals, and combine them in a fashion which will not cause intermodulation interference to be produced. In fact, WNCN, which currently operates on Channel 282B, is located at that site. Due to the distance separation and inherent rejection of the combiner at the Empire State Building, no transmitter generated intermodulation interference is anticipated. If intermodulation products occur in the proposed Fidelio transmitting equipment, appropriate filters will be installed. The applicants for the new master antenna facility to be constructed at the Empire State Building have recognized the need for a properly designed combining system, and have made provision for WNCN in that combiner. It is anticipated that the Commission will ensure that all applicable FCC rules are satisfied with regard to intermodulation products potentially generated in the transmission and combining systems. It is anticipated that the required suppression of spurious signals can be achieved through installation of properly designed and adjusted combining equipment.

With respect to potential blanketing and receiver induced third order intermodulation, the applicant expects no significant problems to occur as a result of the proposed operation. WNCN currently operates at the Empire State Building with identical frequency, albeit at

lower radiated power, and higher antenna height. It is possible that some interference might occur as a result of the relocation and increase in power, but such interference is expected to be limited to the area immediately adjacent to the transmitter site. There are numerous other transmitting facilities located within 10 kilometers. Fidelio is not aware of any adverse interference problems which can be attributed to present operation on 104.3 MHz. Nevertheless, Fidelio is aware that interference may be caused to these facilities, and is prepared to take steps to remedy any new interference which may be caused. It is hereby affirmed on the behalf of Fidelio that it accepts full responsibility for the elimination of any objectionable interference (including that caused by receiver induced or other types of modulation) *caused by its transmissions* to facilities in existence or authorized or to radio receivers in use prior to the grant of this application. The applicant also recognizes that any possible interference may involve other facilities or users of this, or other nearby sites. It is hereby affirmed on behalf of the applicant that full cooperation will be provided towards the resolution of any such problems that might occur.

Statement D

ENVIRONMENTAL CONSIDERATIONS

prepared for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

The instant proposal is not believed to have a significant environmental impact as defined under Section 1.1306 of the Commission's Rules. Consequently, preparation of an Environmental Assessment is not required.

Nature of The Proposal

The applicant proposes to install its antenna and transmitter at the Chrysler Building. That antenna is proposed to be located alongside the spire of the building. While the building supports numerous other antennas for common carrier, and land mobile transmitters, there are no other broadcast facilities known to operate from the site. Section 1.1306(b), Note 1, indicates that use of existing structures and sites will be categorically excluded from environmental processing, unless the RF energy exposure guidelines will be exceeded, or the proposal will impact structures of historical significance. Further, Note 3 to Section 1.1306(b) indicates that categorical exclusion will apply to additional antennas and structures where similar antennas (or structures) are clustered. As noted above, the Chrysler building currently supports numerous other antennas for radio transmitters. The antenna design contemplated for use by Fidelio will be coordinated with the building management to minimize visual impact; it is anticipated that separate horizontal and vertical dipole elements can be employed, if necessary. Such elements are similar in size and shape to the land mobile antennas currently installed on the building. No visual impact is expected from the proposed construction.

Human Exposure to Radiofrequency Radiation

The proposed transmitting system will comply with the guidelines for human exposure to RF radiation contained in ANSI guideline C95.1-1982. The FCC has adopted the ANSI

guideline as the maximum allowable exposure levels for humans in the vicinity of transmitting antennas. This site consists of publicly accessible areas, and areas restricted to workers employed by the Chrysler Building and the transmitting facilities located thereon. Restrictions include locked access doors with restricted key access.

The new antenna radiation center is proposed to be located at a height above ground (213 meters) such that the "worst case" guidelines shown in OST Bulletin No. 65 will not be exceeded at any point on the ground. The building does contain offices, some of which might be located close to the FM antenna. It is not possible to clearly establish at this juncture the exact distances to accessible interior space near the proposed FM antenna. As with other proposals involving existing building structures, substantial attenuation is expected due to the steel-reinforcing of the walls.

Fidelio will establish by measurement, prior to commencing program tests, that the ANSI guideline is not exceeded within any publicly accessible area. If the measured RF energy levels exceed the ANSI guideline in such areas, corrective measures will be taken. It is anticipated that the only areas which might exceed the guideline are near windows which are close to the antenna. Corrective measures which might be employed include relocation of the antenna, installation of "shielded" glass in windows (as has proven effective at the Empire State Building), or restriction of access to areas exceeding the guideline.

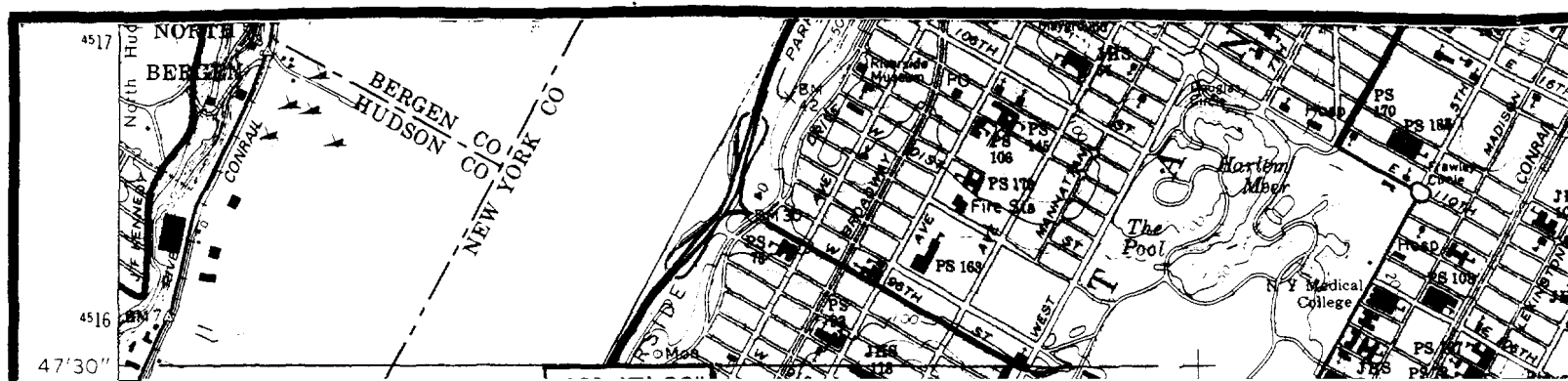
Due to the distance between the Empire State Building and the Chrysler Building, it is believed that the RF energy levels from other broadcast facilities will be insignificant. In any event, the measurements to be taken by Fidelio will establish whether those facilities impact at all on the RF energy levels at the Chrysler building. All other facilities at the Chrysler Building are of low power (low level contributors) or limited duty cycle (time averaging provisions of the ANSI guideline apply), so detailed consideration is not warranted. The applicant for channel 282B will cooperate with these applicants and all other transmitting facility users at the site to ensure that no publicly accessible area exceeds the ANSI exposure guideline.

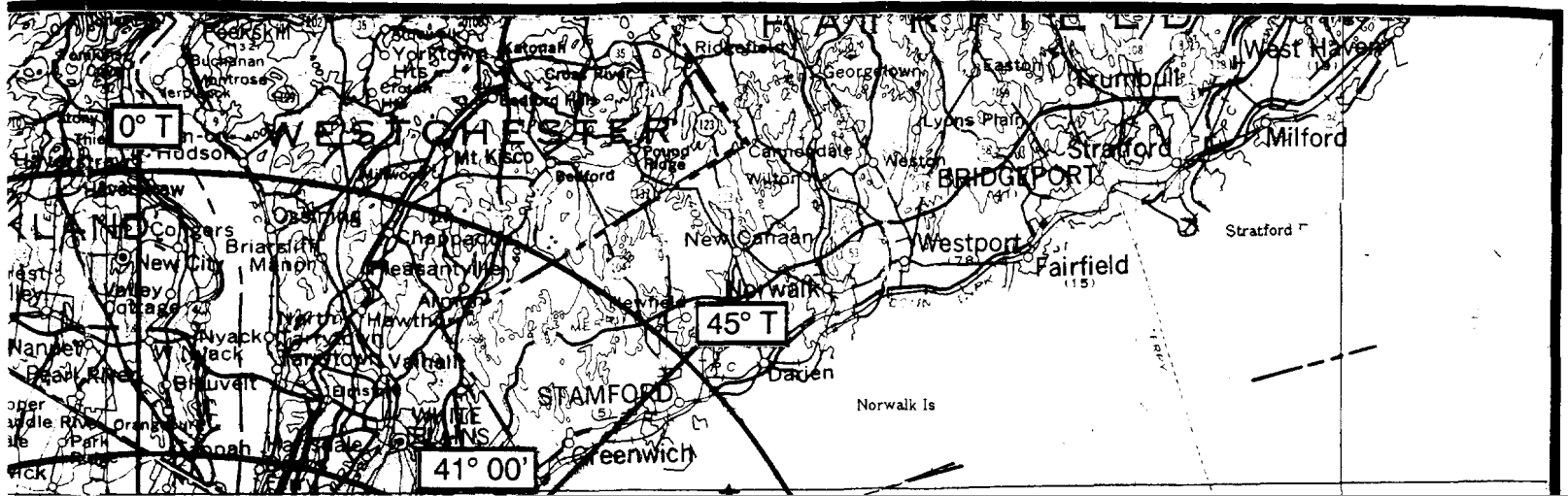
With respect to worker safety, the applicant expects a coordinated worker protection policy to be enforced at the site. All necessary steps will be taken, including but not limited to power reduction, discontinuance of operation, or use of auxiliary facilities to ensure that workers are adequately protected under the ANSI guideline. Full cooperation will be given to other site users with respect to this matter.

Conclusion

The instant proposal may be categorically excluded from environmental processing under Section 1.1306 of the Rules.







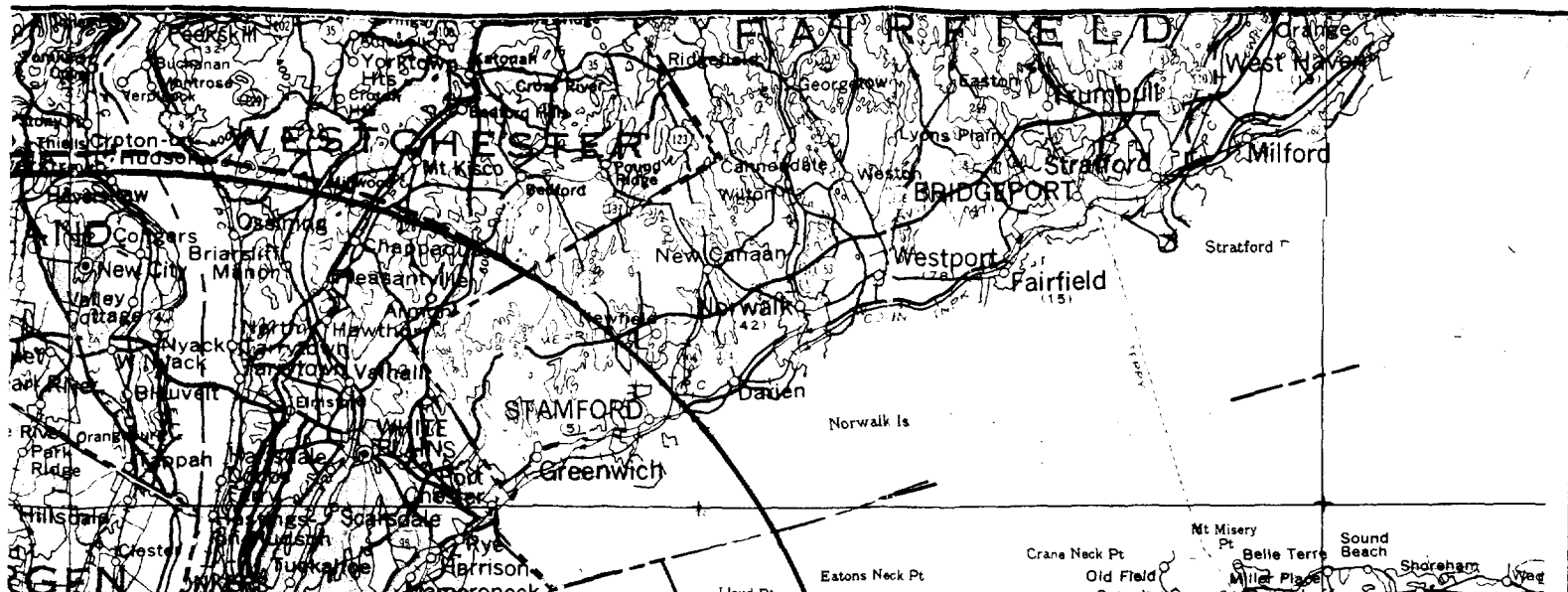
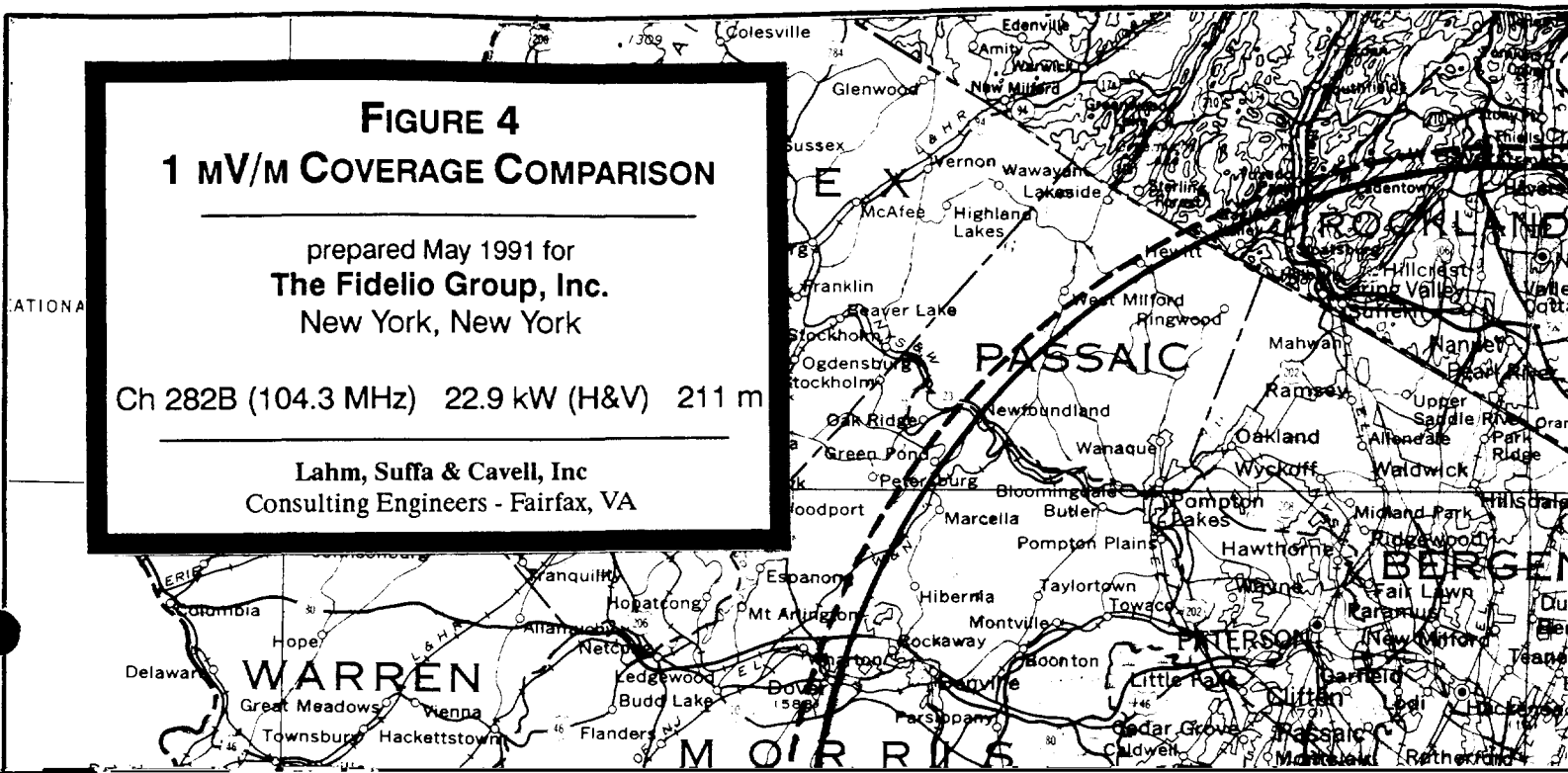


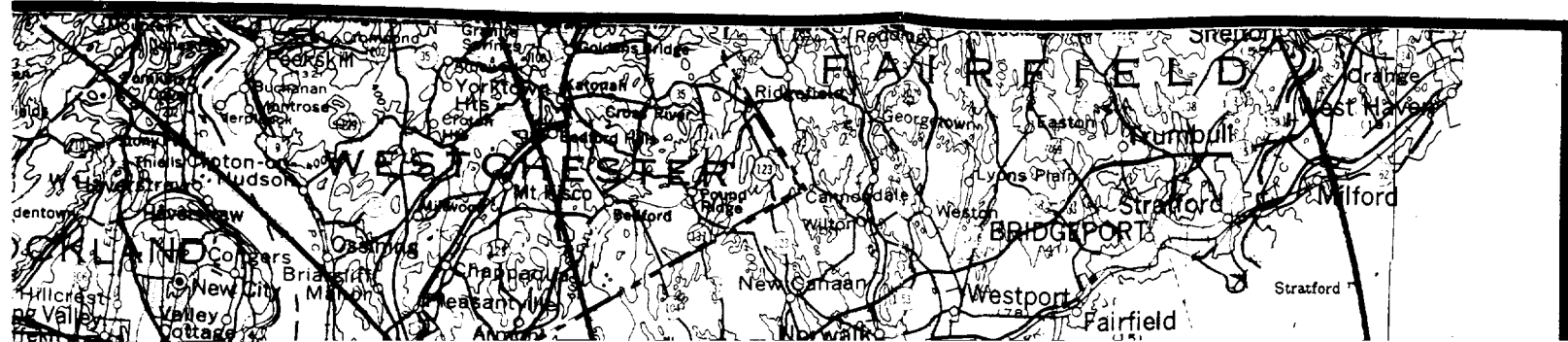
FIGURE 4
1 MV/M COVERAGE COMPARISON

prepared May 1991 for
The Fidello Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

Lahm, Suffa & Cavell, Inc
Consulting Engineers - Fairfax, VA





168.6 km from
WIOF Waterbury, CT

FIGURE 5
CH 282B STATION SEPARATIONS

prepared May 1991 for
The Fidelio Group, Inc.
New York, New York

Ch 282B (104.3 MHz) 22.9 kW (H&V) 211 m

Lahm, Sutta & Cavell, Inc
Consulting Engineers - Fairfax, VA

